Rhode Island Department of Health Fact Sheet Emergency Preparedness for RI Community Water Systems

What is the difference between an Emergency Response Plan required under the Bioterrorism Act and the Emergency Management Plan required as part of the Water Supply System Management Plan (WSSMP)?

Rhode Island drinking water suppliers that produce over fifty million gallons of water per year are required to prepare and submit Water Supply System Management Plans (WSSMPs) per the provision of Chapter 46 - 15.3 of Rhode Island General Laws. Section 8.08: Emergency Management of the <u>Rules and Procedures for WATER SUPPLY SYSTEM MANAGEMENT PLANNING</u> describes the minimum elements that water systems must address in their emergency management plan.

The Bioterrorism Act of 2002 states that "each community water system serving a population greater than 3,300 shall prepare or revise, where necessary, an emergency response plan that incorporates the results of vulnerability assessments that have been completed." It is recommended that water systems that have already developed emergency management plans for the WSSMP incorporate and adapt that information into an easy-to-use and effective emergency response plan that works best for the utility and meets the requirements of the Bioterrorism Act.

Two sources of guidance on what an effective Emergency Response Plan should entail include the <u>Emergency Response Plan Guidance for Small and Medium Systems</u> and the <u>Large Water System Emergency Response Plan Outline</u>. Water Systems can also refer to the <u>Emergency Preparedness</u> section of the RI Dept. of Health Water Security Website.

What is involved in an effective Emergency Response Plan?

There is no one set format for an effective Emergency Response Plan. Systems should develop and update their emergency response plan so that it works best for them.

There are suggestions as to what core elements should entail an Emergency Response Plan. Core elements form the basis, or foundation, for responding to any major event. USEPA has identified eight core elements common to an ERP that water systems should plan to utilize or bring to bear during water emergencies.

- 1. System Specific Information;
- 2. CWS Roles and Responsibilities:
- 3. Communication Procedures: Who, What, and When;
- 4. Personnel Safety:
- 5. Identification of Alternate Water Sources;

- 6. Replacement Equipment and Chemical Supplies;
- 7. Property Protection; and
- 8. Water Sampling and Monitoring.

If a water system already has an ERP in place and just need to revise it, they can refer to the above elements to check if any key information is missing. If a water system is just beginning to develop their ERP, they can refer to the guidance materials previously listed on this page on what an effective Emergency Response Plan should entail.

How do water systems go about developing Action Plans for their Vulnerability Assessment (VA) findings?

The Bioterrorism Act requires that prepared or revised ERPs incorporate the results of completed VAs. During the VA process, water systems should have determined their high priority vulnerabilities. An Action Plan defines the specific actions water systems would take to respond to events where their high priority vulnerabilities had been compromised. In addition, the Office of DWQ recommends that water systems develop Action Plans for certain high consequence events regardless of whether these are among their high-priority vulnerabilities. Events and threats of events that should be considered in Action Plans include the following:

- Contamination of the Drinking Water;
- Structural Damage/Physical Attack;
- SCADA, Computer, or Cyber Attack; and
- Intentional Hazardous Chemical Release (e.g., release of chlorine or ammonia from storage).

Even if a water system's VA did not identify any vulnerabilities, they are encouraged to consider contingency planning for the possibility of these events.

Example Action Plans can be found in Appendix C of the EPA Emergency Response Plan Guidance for small and Medium Systems. Water Systems may also want to consult the EPA Response Protocol Toolbox: *Planning for and Responding to Contamination Threats to Drinking Water Systems*. Both documents can be found at: http://cfpub.epa.gov/safewater/watersecurity/home.cfm?program_id=8

What do community water systems do once their ERP is completed or revised?

Once an ERP is prepared or revised, community water systems that serve a population of greater than 3300 are required under the Bioterrorism Act to submit a written certification stating that the plan has been completed by a certain deadline date. (Do not submit a copy of the ERP to EPA.) USEPA has produced a separate document that addresses ERP certification submittal entitled *Instructions to Assist Community Water Systems in Complying with The Public Health Security and Bioterrorism Preparedness and Response Act, Title IV.* Community Water Systems should consult this document to answer specific questions about submittal procedures and deadline dates. This document can be found at http://www.epa.gov/safewater/watersecurity/pubs/util-inst.pdf

Where do community water systems send their signed ERP Certification?

It is recommend that water systems submit the ERP certification using an express or courier service such as Federal Express, United Parcel Service, Airborne, etc., which provides tracking and certification of delivery. Using one of these services will ensure that the submission is delivered directly to the persons authorized to receive and process these items.

Use the following address for express or courier service deliveries to USEPA. This location is open for deliveries between 8:30am and 4:30pm Eastern Time. Call the number under the address below before attempting delivery outside of those hours.

U.S. Environmental Protection Agency Water Resource Center (WSD-RAR) Room 1119 EPA West Building 1301 Constitution Ave., NW Washington DC 20004 Couriers are to use phone number 202-566-1729.

As stated above, more detailed guidance on preparing and submitting the ERP certification can be found at http://www.epa.gov/safewater/watersecurity/pubs/util-inst.pdf

When should water systems update their ERP?

It is important to note that an ERP is a "living" document that water systems should update periodically (i.e., at least annually or if there is a major change to their CWS configuration). The ER Lead and appropriate CWS management staff should approve the ERP and identify the time period for routinely updating the ERP (e.g., annually). Updates should occur if there are changes in CWS staff, internal and external contacts, roles and responsibilities of anyone involved in response, or there are changes made in infrastructure.

If water systems update their ERP, they are not required to resubmit a written ERP certification to the USEPA.

What type of training is appropriate?

Water systems should make sure that their staff are trained on their ERP responsibilities. Training can include briefing sessions, classroom sessions, or mock exercises. They should also remember to do "refresher" training on a regular basis. Training should include testing of the ERP. Drills and exercises that challenge the information in the ERP should be conducted at least annually. There are many sources (State, Federal, and industry specific) that describe what should be included in emergency training.

These typically include the following four types of training:

- Orientation Sessions: Orientation sessions work well for basic instruction and explaining ERP procedures. Written tests may be employed to ensure some level of comprehension by the attendees.
- Tabletop Exercises: Tabletop exercises involve developing scenarios that describe potential problems and provides certain information necessary to address the problems. The idea is to present staff and emergency response officials with a fabricated event, have them verbally respond to a series of questions, and then evaluate whether the responses match what is written in the ERP.
- Functional Exercises: The Functional Exercise is considered the most effective training tool, next to a real emergency, because a team of simulators is trained to develop a realistic major event. By using a series of pre-scripted messages, the simulation team sends information in to personnel assigned to carry out the ERP procedures. Both the simulators and personnel responding to the simulation are focused on carrying out the procedures to test the validity of the ERP.
- Full Scale Drills: These are the most costly and time-consuming training programs but can be extremely effective. In a full-scale drill, emergency response personnel and equipment are mobilized to a scene, an emergency scenario is presented, and they respond as directed by the ERP.

The bottom line is that time, resources, and personnel need to be dedicated to accomplish the training. Water systems should use the training to identify lessons learned, debrief staff of lessons learned to enhance future response and recovery efforts, and update plans to incorporate lessons learned.

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